

Please replace the paragraph beginning on page 10, line 1,
with the following:

WE CLAIM:

IN THE CLAIMS

Please cancel claims 1-12 without prejudice or disclaimer
of the subject matter contained therein.

Please add the following new claims:

-13. A method for prognosis of progression of
rheumatoid arthritis (RA) and for the evaluation of clinical
course by detecting collagenase 3 as a prognostic clinical
marker, which comprises:

contacting tissues or body fluids with a substance that ^{BINDS} is
able to bind to collagenase 3 mRNA or to collagenase 3;

74
determining an amount of (bounded substance,) bounded
collagenase 3 mRNA or bounded collagenase 3, and

correlating the amount of [bounded substance,] bounded
collagenase 3 mRNA or bounded collagenase 3, with an amount of
collagenase 3 in the tissue or body fluid.

14. A method for detecting an increased genetic predisposition for rheumatoid arthritis (RA) by detecting collagenase 3 as a prognostic clinical marker, which comprises:

contacting tissues or body fluids with a substance that is able to bind^s to collagenase 3 mRNA or to collagenase 3;

determining an amount of bounded substance, bounded collagenase 3 mRNA or bounded collagenase 3, and

correlating the amount of bounded substance, bounded collagenase 3 mRNA or bounded collagenase 3, with an amount of collagenase 3 in the tissue or body fluid.

15. The method according to claims 13 or 14, wherein collagenase 3 mRNA expression is determined qualitatively and quantitatively.

16. The method according to claims 13 or 14, wherein collagenase 3, both as a pro-enzyme and also in an activated form, is determined qualitatively and quantitatively.

17. The method according to claims 13 or 14, wherein catalytic activity of activated collagenase 3 is detected.

18. The method according to claims 13 or 14, wherein quantitative relationships between collagenase 3 and its specific or unspecific inhibitors are determined by determination of free collagenase 3 protein and of collagenase 3 protein bound in complexes with inhibitors and compared.

19. The method according to claims 13 or 14, wherein synovial membrane preparations, cartilage and bone preparations or preparations of a synovial membrane/cartilage interface, obtained in synovectomies, artificial joint replacement, (inter alia operative interventions), and also in biopsies are used as tissue.

20. The method according to claims 13 or 14, wherein synovial fluid or blood are used as body fluids.

21. The method according to Claims 13 or 14, wherein collagenase 3 and markers for ⁷detection of a more severe progression of RA or markers for detection of an increased genetic predisposition are used.